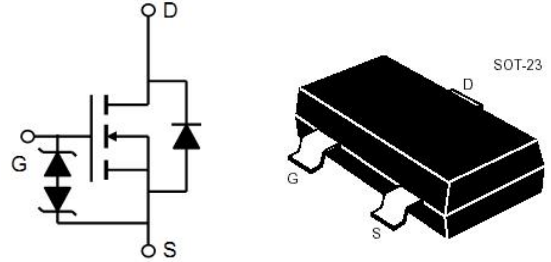




SOT-23 場效應晶體管(SOT-23 Field Effect Transistors)



N-Channel Enhancement-Mode MOS FET With ESD

N 沟道增强型带静电保护 MOS 场效应管

■ **MAXIMUM RATINGS 最大額定值**

Characteristic 特性參數	Symbol 符號	Max 最大值	Unit 單位
Drain-Source Voltage 漏極-源極電壓	BV_{DSS}	60	V
Gate- Source Voltage 柵極-源極電壓	V_{GS}	± 20	V
Drain Current (continuous) 漏極電流-連續	I_{DR}	300	mA
Drain Current (pulsed) 漏極電流-脉冲	I_{DRM}	500	mA

■ **THERMAL CHARACTERISTICS 熱特性**

Characteristic 特性	Symbol 符號	Max 最大值	Unit 單位
Total Device Dissipation 總耗散功率 $T_A=25^\circ\text{C}$ 環境溫度為 25°C Derate above 25°C 超過 25°C 遞減	PD	225 1.8	mW mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient 熱阻	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 結溫和儲存溫度	T_J, T_{stg}	$150^\circ\text{C}, -55\text{to}+150^\circ\text{C}$	

■ ELECTRICAL CHARACTERISTICS 電特性

 (T_A=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

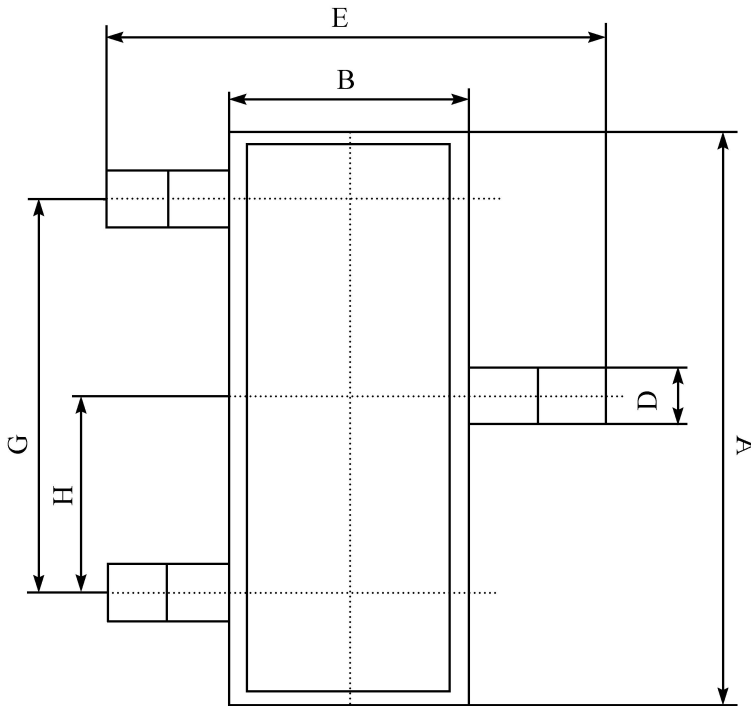
Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓(I _D =250uA, V _{GS} =0V)	BV _{DSS}	60	—	—	V
Gate Threshold Voltage 柵極開啓電壓(I _D =250uA, V _{GS} =V _{DS})	V _{GS(th)}	1.0	—	2.5	V
Drain-Source On Voltage 漏極-源極導通電壓(I _D =50mA, V _{GS} =5V) (I _D =500mA, V _{GS} =10V)	V _{DS(ON)}	—	—	0.375 3.75	V
Diode Forward Voltage Drop 內附二極管正向壓降(I _{SD} =200mA, V _{GS} =0V)	V _{SD}	—	—	1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V _{GS} =0V, V _{DS} =BV _{DSS})	I _{DSS}	—	—	1	uA
Gate Body Leakage 柵極漏電流(V _{GS} =±10V, V _{DS} =0V) (V _{GS} =±20V, V _{DS} =0V)	I _{GSS}	—	—	±1 ±10	uA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D =500mA, V _{GS} =10V) (I _D =50mA, V _{GS} =5V)	R _{DS(ON)}	—	—	3 3.5	Ω
ESD Rating 靜電保護	ESD	1000V HBM			

- FR-5=1.0×0.75×0.062in.
- Alumina=0.4×0.3×0.024in.99.5%alumina.
- Pulse Width≤300 μs; Duty Cycle≤2.0%.



■DIMENSION 外形封装尺寸

單位(UNIT): mm



序號	數值及公差
A	2.90±0.10
B	1.30±0.10
C	1.00±0.10
D	0.40±0.10
E	2.40±0.20
G	1.90±0.10
H	0.95±0.05
J	0.13±0.05
K	0.00-0.10
M	≥0.2
N	0.60±0.10
P	7±2°

